

**REMARKS**

Entry of the foregoing and reexamination and reconsideration of the subject application, as amended, pursuant to and consistent with 37 C.F.R. § 1.112, are respectfully requested in light of the remarks which follow.

Claims 1-26 are pending. Claims 22-26 stand withdrawn. Support for the amendments to claims 1, 3, 5, 7, 19 and 20 can be found at least in the examples and original claims as-filed.

Without acquiescing to the rejections against claims 2 and 6, Applicant has canceled these claims without prejudice or disclaimer as to the subject matter contained therein in order to advance prosecution and expedite allowance. Applicant reserves the right to file a continuation or divisional application on the subject matter canceled by way of this amendment.

**Rejections under 35 U.S.C. § 103**

Claims 1-21 stand rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over Zhang *et al.* in view of Addison *et al.*

Zhang *et al.* purportedly disclose a combination product comprising a nucleic acid and a phospholipid (Dipalmitoylphosphatidylcholine) for delivering the nucleic acid of interest to a cell in a subject for therapeutic purposes. Zhang *et al.* do not specifically disclose that the phospholipid has cytotoxic activity. However, the Office Action states that any phospholipid having the general structure set forth in the general formula (A) on page

11 of the specification, would necessarily have a cytotoxic effect. The phospholipid disclosed by Zhang *et al.* is purportedly encompassed by the phospholipid of general formula (a). Therefore, the Office Action states that the phospholipid disclosed by Zhang *et al.* would have cytotoxic activity.

Addison *et al.* cited for purportedly disclosing an adenoviral vector which expresses IL-2. When the adenoviral IL-2 vector is delivered to a tumor in a mouse, it purportedly results in tumor regression. The Office Action states that it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to modify the complex product disclosed by Zhang *et al.* by substituting the adenoviral-IL-2 vector disclosed by Addison *et al.* for the nucleic acid, and thus create a combination product comprising a nucleic acid encoding a cytotoxic polypeptide and a cytotoxic phospholipid.

Applicant traverses the rejection. To establish a *prima facie* case, the Office must satisfy three requirements. First, the reference relied upon, coupled with the knowledge generally available in the art at the time of the invention must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or to combine the reference. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *See Amgen, Inc. v. Chugai Pharm. Co.*, 18 U.S.P.Q.2d 1016, 1023 (Fed. Cir. 1991). Many pitfalls exist that would eliminate a reasonable expectation of successfully obtaining a patent. Finally, the prior art reference or combination of references must teach or suggest

all the limitations of the claims. *See, In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970). Also, the teachings and suggestions, as well as the expectation of success must come from the prior art and not the applicant's disclosure. *See, In re Vaeck*, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

Applicant asserts that the cited references, when viewed either alone or in combination, do not suggest the claimed invention, as amended herein. Without ceding to the rejections of the claims, Applicant has amended the claims herein to recite a combination product comprising a phospholipid of interest as disclosed in previous claim 2, wherein R1 is a linear or branched carbon based chain comprising from 6 to 30 carbon atoms.

According to the Office Action, Zhang *et al.* disclose a combination product comprising a nucleic acid and a phospholipid (dipalmitoylphosphatidyl choline) for delivering the nucleic acid of interest in a subject for therapeutic purposes. However, Zhang *et al.* do not disclose the use of a phospholipid according to Formula I wherein R1 is a linear or branched carbon based chain comprising from 6 to 30 carbon atoms, as disclosed in claim 1, as amended herein. Further, contrary to what the Office Action states, claims 2-7 (before they were amended herein) were not drawn to a molecule wherein R1 comprises 6-22 carbon atoms. Instead, the claims were directed to a molecule wherein "R1 is a linear or branched carbon based chain comprising from 12 to 22 carbon atoms" [emphasis added].

Therefore, Applicant respectfully submits that the dipalmitoylphosphatidyl choline used by Zhang *et al.* is not encompassed by the scope of claims 2-7.

Dipalmitoylphosphatidyl choline comprises two linear carbon chains, wherein the phospholipids disclosed in claim 1, as amended herein, comprises only one chain.

With regard to Addison *et al.*, the Office Action states that this reference discloses an adenoviral vector which expresses IL-2 which is useful for causing a cytotoxic effect in tumor cells. Applicant notes that Addison *et al.* do not disclose modifying the phospholipids used by Zhang *et al.* in order to prepare the combination product according to the invention.

Thus, the references relied upon do not contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or to combine the references, as the primary reference does not disclose the claimed invention, as amended. Further, the proposed modification of the references does not have a reasonable expectation of success, because the references do not disclose the use of a phospholipid according to Formula I wherein R1 is a linear or branched carbon based chain comprising from 6 to 30 carbon atoms, as disclosed in claim 1, as amended herein. Finally, the references do not teach or suggest all the limitations of the claims, as amended herein.

Therefore, the combination of Zhang *et al.* and Addison *et al.* would not have motivated the skilled artisan to prepare a combination product according to the invention. Applicant respectfully requests that this rejection be withdrawn.

**CONCLUSION**

In view of the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order. Such action is earnestly solicited.


In the event that there are any questions relating to this application, it would be appreciated if the Examiner would telephone the undersigned attorney concerning such questions so that prosecution of this application may be expedited.

Respectfully submitted,

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